

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 March 2005 (24.03.2005)

PCT

(10) International Publication Number
WO 2005/025728 A2

(51) International Patent Classification⁷: **B01F**

(21) International Application Number:
PCT/US2004/005412

(22) International Filing Date: 24 February 2004 (24.02.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/449,740 24 February 2003 (24.02.2003) US

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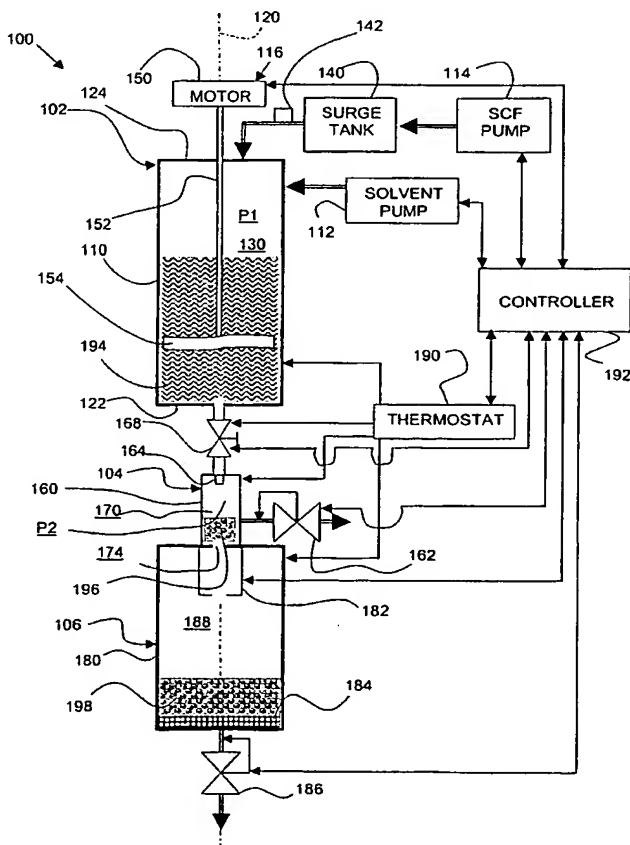
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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR ENHANCED SIZE REDUCTION OF PARTICLES



(57) **Abstract:** The present invention provides methods and apparatus for producing particles via supercritical fluid processing. In one embodiment, the method includes expanding a supercritical fluid plasticized melt across a pressure drop to form solid composite particles that are simultaneously dispersed, foamed and cooled, and milling the solid particles produced to achieve the desired size distribution. In another embodiment, a pressure vessel containing a supercritical fluid plasticized melt is depressurized to form a cooled solid porous mass, which is then milled to obtain solid composite particles.